

3. Bojing

Program Name: Bojing.java

Input File: bojing.dat

Bojing likes to make crossword puzzles. To make it easier to choose words that will fit into his puzzles he needs a list of words that is sorted by length and then alphabetically. For example, he wants all five-letter words grouped together and in alphabetical order, and then all six-letter words alphabetized and so on. He needs a program to sort his word list accordingly and has asked your team to do the job.

Input: Several lines of word lists, each list containing words all in lowercase, single space separation, no punctuation, except for the occasional underscore connecting two words into one.

Output: The entire set of words sorted by length, shortest to longest, and alphabetized within each length group. Each group of words should be on a separate line with single space separation. For example, all five-letter words should be on the same line. Any duplicate words in the input should be deleted from the output. There should be no blank lines in the output.

Sample input:

```
the jaguar is a wild cat species and only
extant member of genus panthera natives to americas present
range extends from southwestern united_states mexico in north_america
across much south paraguay northern argentina though
there are cats now living within_western has
largely_been extirpated since early_century it listed as near
threatened on red list its numbers declining_threats include loss
fragmentation habitat
```

Sample output:

```
a
as in is it of on to
and are cat has its now red the
cats from list loss much near only wild
genus range since south there
across extant jaguar listed living member mexico though
extends habitat include natives numbers present species
americas northern panthera paraguay
argentina
extirpated threatened
largely_been southwestern
early_century fragmentation north_america united_states
within_western
declining_threats
```